

ABSTRACT OF THE DISCLOSURE

NANOEMULSION CONTAINING NONIONIC POLYMERS, AND ITS USES

These objects and others may be accomplished with the present invention, the first
5 embodiment of which provides an oil-in-water nanoemulsion, which includes:

an oily phase dispersed in an aqueous phase;

(i) at least one amphiphilic lipid selected from the group including nonionic
amphiphilic lipids, anionic amphiphilic lipids, and combinations thereof; and

(ii) at least one water-soluble nonionic polymer selected from the group
10 including homopolymers and copolymers of ethylene oxide; polyvinyl alcohols;
homopolymers and copolymers of vinylpyrrolidone; homopolymers and
copolymers of vinylcaprolactam; homopolymers and copolymers of polyvinyl
methyl ether; neutral acrylic homopolymers and copolymers; C₁-C₂ alkyl
celluloses and their derivatives; C₁-C₃ alkyl guar; C₁-C₃ hydroxyalkyl guar; and
combinations thereof;

wherein a ratio of the weight of the oily phase to the weight of the amphiphilic
lipid (i) ranges from 1.2 to 10;

and wherein the oily phase includes oil globules having a number-average size of less
than 100 nm. The nanoemulsion obtained is preferably transparent and stable on storage. It
may form a composition for topical, preferably cosmetic or dermatological compositions,
20 pharmaceutical compositions and ophthalmological compositions.